

Notice of Allowability

Application No.

10/723,672

Examiner

Traviss C McIntosh

Applicant(s)

CICHEWICZ ET AL.

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed 3/19/2004.
2. ☒ The allowed claim(s) is/are 15-21.
3. ☒ The drawings filed on 26 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JAMES O. WILSON

**SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600**

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ian McLeod on September 3, 2004.

The application has been amended as follows:

Claim ¹~~15~~ (currently amended): A method for inhibiting a pathogenic trematode in a warm-blooded animal or human infected with said trematode comprising administering a composition comprising an inhibitory amount of at least one anthraquinone selected from the group consisting of 1,2,8-trihydroxy-3-methyl anthraquinone and 1,2,8-trihydroxy-3-hydroxymethyl anthraquinone in a pharmaceutically acceptable carrier to said warm-blooded animal or human to inhibit the pathogenic trematode.

Claim ²~~16~~ (currently amended): The method of claim ¹~~15~~ wherein the anthraquinone is inhibitory at a dosage of 1 to 1,000 micrograms per milliliter or gram.

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³
Claim ~~17~~ (currently amended): The method of claim ~~15~~¹ wherein the anthraquinone is administered to the warm-blooded animal or human orally, subcutaneously, intraperitoneally, intravenously, topically, intranasally, or rectally.

⁴
Claim ~~18~~ (currently amended): A method for inhibiting a pathogenic trematode in a warm-blooded animal or human infected with said trematode comprising administering a composition comprising an inhibitory amount of 1,2,8-trihydroxy-3-methyl-*O*- β -D-glucopyranoside anthraquinone and at least one anthraquinone selected from the group consisting of 1,8-dihydroxy-2-*O*- β -D-glucopyranoside anthraquinone and 1,8-dihydroxy-2-*O*-malonyl-(1-6)- β -D-glucopyranoside anthraquinone in a pharmaceutically acceptable carrier to said warm-blooded animal or human to inhibit the pathogenic trematode.

⁵
Claim ~~19~~ (currently amended): The method of claim ~~18~~⁴ wherein the composition further includes an inhibitory amount of at least one anthraquinone selected from the group consisting of 1,2,8-trihydroxy-3-methyl anthraquinone and 1,2,8-trihydroxy-3-hydroxymethyl anthraquinone.

⁶
Claim ~~20~~ (currently amended): The method of claim ~~18~~⁴ wherein the anthraquinone is inhibitory at a dosage of 1 to 1,000 micrograms per milliliter or gram.

⁷
Claim ~~21~~ (currently amended): The method of claim ~~18~~⁴ wherein the anthraquinone is administered to the warm-blooded animal or human orally, subcutaneously, intraperitoneally, intravenously, topically, intranasally, or rectally.

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The specification has been amended as follows:

The first paragraph of the specification, under the heading "Cross-Reference To Related Application" on page 1 has been replaced with the following paragraph:

This application is a divisional of Application Serial No. 10/317,906, filed December 12, 2002, which claims priority to Provisional Application Serial No. 60/372,576, filed April 15, 2002, and Provisional Application Serial No. 60/389,368, filed June 17, 2002.

The following is an examiner's statement of reasons for allowance: the prior art of record does not teach or fairly suggest the use of 1,2,8-trihydroxy-3-methyl anthraquinone, 1,2,8-trihydroxy-3-hydroxymethyl anthraquinone, or glucopyranoside derivatives thereof in treating pathogenic trematode infections, wherein the closest prior art is seen to be Spainhour who teaches that emodin (which is 1,3,8-trihydroxy-6-methyl anthraquinone and structurally divergent at the 2, 3, and 6 positions of the anthracene ring system) is effective against *Schistosoma* species.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

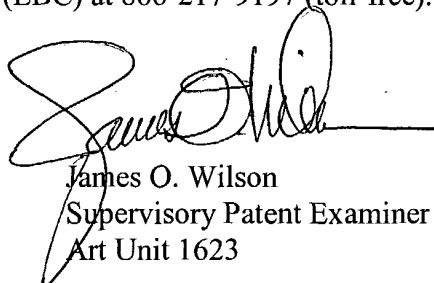
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Traviss C McIntosh whose telephone number is 571-272-0657. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Traviss C. McIntosh III
September 3, 2004



James O. Wilson
Supervisory Patent Examiner
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